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PATENTS 12-10-C Attorney Docket No. SYN-017

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Maarten H. Stuiver et al.

Art Unit: 1635

Serial No.:

09/581,331

Examiner: K. Lacourciere

Filing Date: July 21, 2000

Title:

Constitutive Plant Promoter

Assistant Commissioner for Patents Washington, DC 20231

RESPONSE TO RESTRICTION REQUIREMENT UNDER 35 U.S.C. § 121 AND § 372

Applicants hereby respond to the Office Action dated September 7, 2001, which detailed a Restriction Requirement under 35 U.S.C. §§ 121 and 372. A Petition for a two-month Extension of Time for Response, up to and including December 7, 2001, is submitted herewith. The Action contained a two-way Restriction Requirement. The Examiner grouped the claims as follows (Office Action, page 2):

Group I, claims 1-8, drawn to a chimeric plant promoter, wherein the promoter is a combination of the ferrodoxine and ro1D promoters; and

Group II, claims 1-3 and 9-15, drawn to a chimeric plant promoter, wherein the promoter is a combination of the plastocyanin and the S-adenosyl-methionine-1 promoters.

Applicants respectfully traverse this Restriction. Applicants contend that the subject matter of Groups I and II, claims 1-15, is united by a single inventive concept under PCT Rule 13.1 with the same or corresponding special technical features required by PCT rule 13.2. The invention relates to a chimeric plant promoter that "comprises a minimal promoter and transcription-activating elements from a set of promoters, which

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elements have a complementary pattern and level of transcription in a plant," as recited in claim 1. The unifying inventive concept and corresponding special technical feature of Groups I and II is the use of promoters and transcription-activating elements with complementary expression patterns of transcription in plants.

The Examiner cites Gelvin et al. as disclosing the use of plant promoters with complementary expression patterns. Applicants respectfully disagree. Gelvin discloses a chimeric plant promoter comprising transcription-activating elements from the mannopine synthase (mas) and octopine synthase (ocs) promoters linked to a minimal promoter. (Gelvin et al., p. 6, l. 16-27) However, Gelvin also teaches that the mas and ocs genes do not have complementary expression patterns. The mas gene is predominately expressed in roots (mean level of 12024 pmol/min/mg), with significantly less expression in the stem (1117 pmol/min/mg) and leaves (987 pmol/min/mg). (Gelvin et al., Fig. 2, Construct 2) The ocs gene is also predominantly expressed in the roots (803 pmol/min/mg), with less expression in the stem (309) pmol/min/mg) and leaves (566 pmol/min/mg). (Gelvin et al., Fig. 4, Construct 8) Additionally, Kononowicz et al. teach that the "expression of the ocs gene is the greatest in the leaves and root tips, lesser in the stem and the flowers, and very low in the root base." (Kononowicz et al., The Plant Cell 4:17-27 (1992)) Thus, the mas and ocs promoters are not complementary because both predominantly direct expression in the roots.

Therefore, Applicants assert that the subject matter of Groups I and II, claims 1-15, relates to a single inventive concept with the same special technical feature, namely, a chimeric plant promoter comprising a minimal promoter and transcription-activating elements with complementary patterns and levels of transcription. Withdrawal of the Restriction Requirement with respect to claims 1-15 is, accordingly, respectfully requested and believed to be in order. Upon withdrawal of the Restriction Requirement with respect to Groups I and II, claims 1-15, Applicants respectfully elect to prosecute claims 1-15.

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Nevertheless, in the event that the Examiner disagrees with the traversal and does not withdraw the Restriction, and in order to be in full compliance with the Restriction, Applicants elect to pursue Group I, claims 1-8. Additionally, however, Applicants note that claim 15, as amended, is dependent upon claim 1 and should, therefore, be included in Group I.

Further and favorable consideration of all the claims of record on the merits is respectfully requested.

A Petition for a two-month Extension of Time for Response is submitted herewith, along with an authorization to charge the required fee to our Deposit Account No. 08-0219. No other fees are believed to be due. However, if any such fees are due, please charge them to our Deposit Account No. 08-0219.

Respectfully submitted,

Michael J. Twomey

Reg. No. 38,349

Dated: December 7, 2001

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Re:	U.S. Patent Application No. 09/581,331 filed July 21, 2000 Title: Constitutive Plant Promoter Inventor: Stulver et al. Examiner: K. Lacquiclere - Group Art Unit: 1635 Attorney Docket No.:109846.129 (SYN-017) [MSOffice1]				
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TRANSMITTAL	Filing Date	July 21, 2000				
FORM	First Named Inventor	Stuiver et al.				
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	Examiner Name	K. Lacourciere				
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ENCLOSURES (check all that apply)						
Fee Attached Fee Attached Drawing	ng-related Papers Routing Slip (PTO/SB/69) Empanying Petition to Convert to a conal Application of Attorney, Revocation of Correspondence	After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Repty Brief) Proprietary Information Status Letter Additional Enclosure(s) (please Identify below) Postcard				
	CANT, ATTORNEY, OR A	AGENT				
Firm or Individual name Michael J. Twomey (Reg. No. 38,349)						
Signature Aprilarly Thromes						
Date December 7, 2001						
CERTIFICATE OF MAILING						
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